TREMAINE (W.S.)

Cyst of the pancreas
successfully removed.

Compliments of the writer
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CYST OF THE PANCREAS SUCCESSFULLY REMOVED.

BY W. S. TREMAINE, M.D.,
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JAMES H., aged twenty, was injured August 2, 1886, while coupling cars for the D. L. & W. R. R.; one car being lower than the other, he was squeezed in the abdominal region.

The history of the case as given me by himself and family was, that he had no fever, was not confined to bed, but that he suffered with pain and "burning distress" in the epigastric region; about four weeks after the injury, frequent vomiting set in, with rapid emaciation. During this time he had been under the care of a physician.

On September 20th, he came under the care of Drs. King and Rogers, who called me in consultation October 17, 1886. At this time he had a marked swelling in the epigastric region, extending from the ensiform cartilage to the umbilicus, great emaciation, unable to retain food of the simplest character, pain and distress in the abdomen, bowels moved, in response to cathartics, pulse 100, temperature normal.

Diagnosis.—A circumscribed tumor of the abdomen containing fluid, probably either a cyst of the pancreas or hydatids. October 21st, was removed to the hospital, when I drew off with a large hypodermatic syringe a small quantity of clear slightly opalescent fluid, which showed a slight coagulum after heating, redissolved on the addition of acetic acid; upon adding nitric acid a deep orange-yellow precipitate formed.

A small quantity of lard was melted in a test-tube and about twice the quantity of the fluid added to it; a permanent emulsion was the result; a solution of starch was thinned by the fluid after standing in a warm place for twenty-four hours, and gave with the Fehling's test the reaction of grape sugar.

The microscopic examination was negative, no hooklets.

I considered diagnosis of cyst of the pancreas fairly established, but

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referred a sample of the fluid to Prof. A. R. Davidson for examination, with the following result:

"Reaction slightly alkaline.
Chloride of sodium, 0.57 per cent.
Albumin, 10 per cent. by volume.
Urea, none.
Succinic acid, none.
Sugar present in small quantities.
Paraglobulin, none.
Fibrinogen, none.
Spectroscopic examination negative.
Specific gravity, 1.0075.

"Cod-liver oil mixed with the fluid in the proportion of one-tenth its volume was completely emulsified. The small quantity of fluid received prevented any experiments as to action on starch or examination for leucin and tyrosin."

On the night of the 24th, the patient had violent pain in the abdomen, copious vomiting, and collapse.

On the 25th of October, at 11 A. M., with the assistance of Dr. Mickle, and in the presence of Drs. King, Rogers, and Davidson, I made an opening into the abdominal cavity about midway between the end of the sternum and the umbilicus in the median line; after the peritoneum (which was normal) was opened, a quantity of fluid similar to that withdrawn by the syringe welled up from the peritoneal cavity. The cyst had evidently ruptured, and collapsed probably during the manipulation antecedent to the abdominal incision. The finger was used to explore. The colon was displaced downward on a level with the umbilicus; behind the stomach, and below its greater curvature could be felt the collapsed cyst wall; the peritoneal cavity was emptied of fluid by turning the patient on one side and compressing the abdominal walls. The ragged edges of the cyst wall were stitched with the peritoneum, and the abdominal wound closed with aseptic silk sutures and dressed with a pad of iodoform gauze. The condition of the patient before the operation led us to think that death was imminent. After the operation he rallied and seemed better.

October 26. Temp. 99°, pulse 84, no vomiting, no pain. Ordered peptonized milk, two tablespoonfuls every hour, with hot water occasionally in small quantities to allay thirst.

27th. Patient passed a comfortable night, no pain, no abdominal

tenderness, no tympanites. Pulse 84, temp. 99°. Continued peptonized milk, which is retained and does not cause nausea, this being the first food retained for four weeks.

30th. Pulse 84, temp. normal, no pain, no vomiting, bowels moved.

November 1. Dressing changed; union by first intention, except a small point about half an inch long at the upper angle of wound.

3d. Dressing removed, prominence showing in epigastric region, dulness on percussion. Cyst evidently refilling. Lower angle of wound opened under chloroform and drainage tube introduced, about one and a half ounces of fluid escaped.

5th. Patient passed a bad night from pain and vomiting, which was relieved by morph. sulph. gr. ¼, hypodermatically. Pulse 90, temp. normal. Vomited occasionally a greenish frothy fluid, and constantly spitting a mouthful of saliva. Ordered peptonized milk and beef by enema.

7th. No vomiting, no pain, fluid discharging through drainage tube and macerating skin of abdomen.

From this time on the patient rapidly improved, the discharge gradually diminished. His appetite and nutrition improved, he was discharged cured on December 6, 1886.

When I last him, about three months after the operation, he was quite well, fat, and to all appearances completely cured.

The subject of the surgery of the pancreas has been ably and exhaustively treated by Dr. Senn, in a paper read by him before the American Surgical Association, in Washington, D. C., April, 1886, and also in a paper on "Cysts of the Pancreas," read in the Section on Surgery and Anatomy, at the thirty-sixth annual meeting of the American Medical Association. In the latter paper he describes a case of cyst of the pancreas occurring in his own practice, apparently from injury. So far as I know, these are the only two cases reported in America, in which a correct diagnosis was made, and the cyst successfully treated by surgical measures.